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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
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09/551,399 04/17/00 CHASE

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EXAMINER

WM01/0731

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ART UNIT

PAPER NUMBER

2661

DATE MAILED:

07/31/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

1.4

# Office Action Summary

Application No.

09/551,399

Applicant(s)

CHASE ET AL.

Examiner

Shick Hom

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) 1, 11-20, 22, 23, 28 and 39 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22, 31, 52, 54, and 55 is/are allowed.
- 6) ☒ Claim(s) 2-10, 21, 24-27, 29, 30, 32, 34-38, 40-51, and 53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☒ The proposed drawing correction filed on 07 February 2001 is: a) ☒ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

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**DETAILED ACTION**

***Response to Amendment***

1. The reply filed on 4/27/01 is not fully responsive to the prior Office action because of the following omission(s) or matter(s): the second supplemental amendment dated and received on 4/27/01 was received after the mailing of the 4/25/01 office action and is not responsive to the 4/25/01 office action. See 37 CFR 1.111. Since the above-mentioned reply appears to be *bona fide*, applicant is given a TIME PERIOD of **ONE (1) MONTH or THIRTY (30) DAYS** from the mailing date of this notice, whichever is longer, within which to supply the omission or correction in order to avoid abandonment. EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).

***Response to Arguments***

2. Applicant's arguments filed 1-12-01 and 2-7-01 have been fully considered but they are not persuasive.
3. Applicant's arguments with respect to claims 2-10, 21-22, 24-27, 29-32, 34-38, and 40-55 have been considered but are moot in view of the new ground(s) of rejection.

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***Specification***

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103<sup>®</sup> and

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potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 2, 3, 7-10, 21, 24-25, 27, 29-30, 32, 34-35, 37-38, 40-46, and 49-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schibler et al. in view of Focsaneanu et al.

Schibler et al. disclose nearly all the subject matter now claimed. Note col. 3 line 63 to col. 4 line 19 which recite the method of routing having routes calculated in advance for all possible categories of hypothetical route requests whereby tables of precalculated routes are maintained wherein changes occurring in switch and network topology require only changes to the created tables and col. 4 lines 20-43 which recite the route processor accepting route request cells from various line cards within the broadband switching module, extracting service and addressing information therefrom, building and receiving route response cells, performing table lookup function through the routing tables and in response to route request received from a line card, extracts the service type, and determining whether the destination address is a single or group address clearly anticipate the method having the step of utilizing separate routing tables within an ATM switch for each service categories

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as in claims 40, 49, and means for associating a data link connection identifier according to the service category as in claim 49. Further, col. 1 lines 8-11 which recite the method and apparatus for generating route information for asynchronous transfer mode cell processing clearly anticipate the asynchronous transfer mode switch as in claims 24, 37, 46, 50, 51. Col. 7 lines 22-37 which recite the step of marking the information packet whereby the first cell is marked as a beginning of message cell which contains a message identification to distinguish cells belonging to the same packet, a source address, and a destination address clearly reads on the translation circuitry for translating packets into asynchronous transfer mode cells whereby an address is assigned based on information in a user data field of the packets as in claims 32, 38, 43-44, the packets and cells of claim 21. Col. 8 lines 22-39 which recite using a database containing user service profile USP, i.e. information concerning the user subscribed service categories, the modalities of handling different types of traffic, and address conversion for easy addressing whereby the database also contain protocol conversion, rerouting, and other information which is required by transport networks for better management clearly reads on having routing tables for each of the plurality of service categories as

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in claims 24 and 46 and as argued in pages 6 and 8 of the amendment of 1/12/01.

Schibler et al. did not recite the use of frame relay data packets as in claims 2, 32, 38, 43, 44, 49-51, routing over the Internet as in claims 3, 25, 34-35, 41-45, 51, the multicast data as in claim 7, voice and video data as in claims 8-9, the layer 3 and layer 4 IP address as in claims 10, 27 and the step of determining routing errors as in claim 45.

Focsaneanu et al. teach that it is known to use network interfaces including X.25 packet networks, frame relay, SMDS, ATM, TCP/IP as set forth at col. 10 line 57 to col. 11 line 2 in the field of digital and multiplex communications for the purpose of providing access to telecommunications networks in multi-service environment which clearly anticipate the use of the frame relay data packets. Col. 2 lines 37-61 which recite the use of multimedia broadband switched networks for carrying different types of traffic, i.e. voice, data, and video information including the use of broadcasting and multicasting through the circuit switched network and accessing the Internet via the PSTN and whereby the network service providers provide access to various other private networks, academic networks etc., which contain vast numbers of databases for value added services clearly anticipate routing over the Internet as in claims 3,

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25, 34-35, 41-45, 51, the multicast data as in claim 7, and voice and video data as in claims 8-9. Col. 8 lines 41-54 which recite the layer 1 and layer 2 functionalities supported by today's modem standards whereby Layer 2 implementation include data link connection, error notification, flow control and data unit transfer clearly anticipate the layer 3 and layer 4 IP address as in claim 27 and the step of determining routing errors as in claim 45.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use frame relay data packets, routing over the Internet, virtual private network, the multicast data, voice and video data, layer 3 and layer 4 IP address, and the step of determining routing errors as taught in Focsaneanu et al. to the system of Schibler et al. because Focsaneanu et al. teach the desirable advantage of providing a more flexible and adaptable access to telecommunications network in a multi-service environment and said more flexible and adaptable access being desirable to achieve less wasteful of resources and more efficient system operation in Schibler et al.

8. Claims 26, 47, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schibler et al. as applied to claim 46 above, and in view of Lozano et al.



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Schibler et al. did not recite the step of partitioning routing tables by customer as in claims 26, 47, and wherein the routing tables are separated based on data link connection identifiers as in claim 48.

Lozano et al. teach that it is known to provide the step of separating services into partitions whereby a partition is a set of tables in a switch that has substantially the same data to other partitions with the exception of data specific to the partition wherein allows exception routing for customer A such that calls to the area are blocked and another customer B on the other hand, has a routing, for example the default routing, that enables calls to the area in the field of telephonic communications for the purpose of providing advantages to end users in terms of flexibility which clearly anticipate the step of partitioning routing tables by customer as in claims 26, 47, and wherein the routing tables are separated based on data link connection identifiers as in claim 48.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the step of partitioning routing tables by customer wherein the routing tables are separated based on data link connection identifiers as

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taught by Lozano et al. to the system of Schibler et al. because Lozano et al. teach the desirable advantage more flexibility to users and said more flexibility to users being desirable to achieve efficient system operation in Schibler et al.

9. Claims 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schibler et al. in view of Focsaneanu et al. as applied to claims 2, 3, 7-10, 21, 24-25, 27, 29-30, 32, 34-35, 37-38, 40-46, and 49-53 above, and in view of Abensour et al.

Schibler et al. In view of Focsaneanu et al. did not recite the translation circuitry for translating frame relay packets into ATM cells having an address responsive to layer 3 and layer 4 IP data contained within the user data field of the packets as in claims 43 and 44.

Abensour et al. teach that it is known to provide ATM connectivity for a Frame Relay DTE using an intelligent Terminal Adapter TA including an enhanced Frame Relay protocol which runs between the DTE and the ATM TA, the Frame Relay DTE is provided with not only the connectivity to the ATM network but also the FR DTE can choose to transmit its data using ATM Adaptation Layer AAL 1,3/4 or 5 as set forth at col. 2 lines 39-53 in the field of

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digital and multiplex communications for the purpose of providing ATM support for frame relay DTEs which clearly anticipate the translation circuitry for translating frame relay packets into ATM cells having an address responsive to layer 3 and layer 4 IP data contained within the user data field of the packets as in claims 43 and 44.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the translation circuitry for translating frame relay packets into ATM cells having an address responsive to layer 3 and layer 4 IP data contained within the user data field of the packets as taught by Abensour et al. to the system of Schibler et al. because Abensour et al. teach the desirable added feature of providing ATM support for frame relay DTEs in system operation in Schibler et al. in view of Focsaneanu et al.

***Allowable Subject Matter***

10. Claims 22, 31, 52, and 54-55 are allowed.

11. Claims 4-6, and 36 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

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12. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications  
intended for entry)

Or:

(703) 308-5403, (for informal or draft  
communications, please label "PROPOSED" or  
"DRAFT")

Hand-delivered responses should be brought to Crystal  
Park II, 2021 Crystal Drive, Arlington. VA., Sixth  
Floor (Receptionist (703) 305-4700).


Any inquiry concerning this communication or earlier  
communications from the examiner should be directed to Shick Hom  
whose telephone number is (703) 305-4742.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4750.

SH

July 18, 2001

  
DOUGLAS OLMS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600